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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,835	10/23/2003	James R. Przybyla	200312308-1	6671
22879	7590	04/18/2005	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			KOVAL, MELISSA J	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/691,835

Applicant(s)

PRZYBYLA ET AL.

Examiner

Melissa J. Koval

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date October 23, 2003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

Claims 1, 8 and 10 are objected to because of the following informalities: In line 3 of claim 1, the phrase "at least one of reflect and emit one or more ranges" is grammatically awkward, as well as the final portion of claim 1 that reads as follows: "an ambient light source that is configured to output visible wavelengths of light in the at least one other range that has a greater intensity as weighted by the sensitivity of a human eye than that of wavelengths of light output by the ambient light source in the one or more ranges." The ambient light source is referred to twice in a way that is confusing because it seems that applicant may have intended to refer to an ambient light source and a different light source. Claim 8 suffers from similar problems. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9-16, 18-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Deter et al. U.S. Patent 6,428,169 B1 teaches an image representation system.

Refer to Figures 2 and 9, for example.

Claim 1 sets forth: "A projection system comprising (See column 7, lines 25 and 26.):

a projection screen to (See projection surface 7 as well as projection screen 3 and optical filter 11.):

at least one of reflect and emit one or more ranges of wavelengths of visible light (See column 7, lines 38 through 42.); and

absorb visible wavelengths of light in at least one other range that is not included in the one or more ranges (See column 10, lines 35 through 59, for a variation on optical filter 11.); and

an ambient light source that is configured to output visible wavelengths of light in the at least one other range that has a greater intensity as weighted by the sensitivity of a human eye than that of wavelengths of light output by the ambient light source in the one or more ranges." References to ambient light are found in column 7, lines 12 through 24, and lines 55 through 61, for example. The teaching therein meets all of the limitations of the claim as far as the plain language of the claim can be understood.

Claim 2 sets forth: "A projection system as described in claim 1, further comprising a projector to project an image composed of the one or more ranges of wavelengths of light." See projector 1.

Claim 3 sets forth: "A projection system as described in claim 1, wherein the one or more ranges include:

a range of red wavelengths of visible light;
a range of green wavelengths of visible light; and
a range of blue wavelengths of visible light.” See column 6, lines 58 through 65,
and column 7, lines 25 through 31, for example.

Claim 4 sets forth: “A projection system as described in claim 1, wherein the one
or more ranges include a range of ultraviolet wavelengths that cause the projection
screen to emit visible light.” See column 10, lines 45 through 47.

Claim 5 sets forth: “A projection system as described in claim 1, wherein the one
or more ranges include a range of ultraviolet wavelengths and a range of visible
wavelengths.” Again, see column 10, lines 45 through 47. Both blue and ultraviolet light
are referred to.

Claim 6 sets forth: “A projection system as described in claim 1, further
comprising a projector to project an image composed of the one or more ranges of
wavelengths of light, wherein the projector includes a component selected from
the group consisting of:

a digital micromirror device (DMD);
a liquid crystal display (LCD);
a grating light valve (GLV); and
a liquid crystal on silicon (LCOS) device.” See column 8, lines 38 through 45,
wherein both LCD projectors and a DMD array are referred to, for example.

Claim 7 sets forth; "A projection system as described in claim 1, wherein the projection screen is configured to absorb the visible wavelengths of light in the at least one other range by utilizing a component selected from the group consisting of:

a filter;

a pigment;

an optical coating;

an optical dye; and

any combination thereof." Again refer to filter 11. Also see column 9, lines 33 through 37, and column 9, lines 45 through 67, they refer to Figure 6.

Claim 9 sets forth: "A projection system as described in claim 1, wherein the ambient light source does not output an image." See ambient light 9 and column 7, lines 55 through 61.

Claim 10 sets forth: "A projection system comprising:

a projection screen to:

at least one of reflect and emit one or more ranges of wavelengths of visible light; and

absorb visible wavelengths of light in at least one other range that is not included in the one or more ranges; and

a light filtering structure that:

at least one of reflects and absorbs wavelengths of light emitted by the light emitting device in the one or more ranges', and transmits wavelengths of light in the at least one other range."

Claims 10 through 16, 18-33 are rejected for the same reasons already applied to rejected claims 1 through 7 and 9 above, and furthermore consider column 8, lines 46 through 61, with respect to transmission.

Claim 18 sets forth: "An apparatus as described in claim 16, further comprising a window that transmits wavelengths of light that include the one or more ranges and the at least one other range, wherein the light filtering structure is disposed on the window." See the embodiment of Figure 1, and column 7, lines 32 through 37. The portion of the screen upon which filter 11 is applied is interpreted by the examiner to be "a window".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deter et al. (U.S. Patent 6, 428,169 B1) in view of Lippey et al. (U.S. Patent 6,847,483 B2).

Claim 8 sets forth: "A projection system as described in claim 1, wherein the ambient light source further comprises:

a light emitting device that emits wavelengths of light that include:

the one or more ranges; and

the at least one other range; and
a light filtering structure that:
at least one of reflects and absorbs wavelengths of light emitted by
the light emitting device in the one or more ranges; and
transmits wavelengths of light in the at least one other range.”

Deter et al. '169 B1 teach all of the elements of claim 8, except that Deter et al. do not specifically address filtering the ambient light.

Filtering of ambient light is taught by Lippey et al. '483 B2. See column 9, lines 9 through 22 of '483 B2. The filtering of the ambient light is chosen to allow wavelengths that will be absorbed in the screen.

Therefore it would have been of obvious to one having ordinary skill in the art at the time the invention was made to substitute the filtered ambient light as taught by Lippey et al. '483 for the unfiltered ambient light shown by Deter et al. '169 B1, thus meeting the limitations of claim 8. The motivation for one having ordinary skill in the art to make such a substitution would be to improve viewing conditions for the viewer.

Claim 17 is rejected for the same reasons already applied to rejected claim 8.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hou U.S. Patent 6,836,361 B2 teaches a method and apparatus to increase visual contrast for video projection screen.

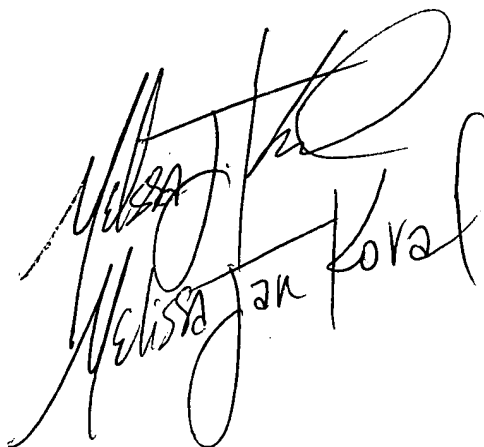
Ouderkirk et al. U.S. Patent 6,685,341 B2 teaches a light fixture having a multilayer polymeric film.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa J. Koval whose telephone number is (571) 272-2121. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571)272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJK

A handwritten signature in black ink, appearing to read "Melissa J. Koval". The signature is stylized with large, sweeping loops and is written over a faint, larger version of the same name.